XP002901448

(C) WPI / DERWENT

AN - 1982-09501E [05]

PR - SU19792788379 19790504

TI - Formation of gold-like decorative coatings - by depositing thin layer of titanium, tantalum, niobium, tungsten or silicon and electrolytically oxidising

IW - FORMATION GOLD DECORATE COATING DEPOSIT THIN LAYER TITANIUM TANTALUM NIOBIUM TUNGSTEN SILICON ELECTROLYTIC OXIDATION

PA - (EDUC-R) EDUC ESTAB DES

PN - SU823331 B 19810423 DW198205 003pp

IC - C03C17/24

AB - SU-823331 Decorative gold coatings are deposited on porcelain, ceramic, glass, cermet, enamelled etc. surfaces by: depositing a layer of Ti, Ta, Nb, W or Si; and electrolytically oxidising the deposit in a 0.01-0.1 M salt or acid soln. at a voltage of 30-50 V to form an oxidised layer of thickness 800-1550 Angstrom. The resulting coating has high wear resistance, a bright gold colour and good stability towards acids, alkalis heat etc.

 The adhesion of the coating to the substrate may be enhanced by an intermediate layer formed by the cathodic sputtering of a 150-300 Angstrom layer of a mixt. of the above metal and its

oxide. (3pp)